North Buffalo Sanitary Sewer and Stream Restoration Project Public Meeting

Agenda September 27, 2004, 6pm

- **Sanitary Sewer Replacement**Kenney McDowell, Engineer, Water Resources Department
- ♦ Stream Restoration in Latham Park
 David Phlegar, Water Quality Supervisor, Water Resources Department
- **♦** Resident Feedback Comments, Questions, and Concerns

Addressing Sewer Overflows in Latham Park: Project Facts

The City of Greensboro is making progress on its plan to address sewer overflows in the Latham Park and Lake Daniel Park areas. This comprehensive project, the North Buffalo Sanitary Sewer Project, was approved by City Council in November of 2003 and includes the installation of over nine miles of pipe, the construction of three new sewer pump stations, and a stream restoration of North Buffalo Creek within Latham Park.

When will construction begin within Latham Park? Construction within Latham Park is estimated to begin in 2007 and last approximately one year. This estimate may change as the project progresses.

How can I find information about the project? For more information, and to sign up to receive email updates about the project, please visit our website at www.greensboro-nc.gov/water or call 373-7610.

What causes sewer overflows? Sewer overflows are caused by aging, deteriorating sewer systems. Unlike streets, where potholes and cracks are easy to find and repair, most of the sewer system is buried underground. Nearly 500 miles of sewer lines, in various stages of deterioration, drain to the main sewer line, or outfall, that runs through Latham Park. During wet weather, groundwater and rainwater leaks into the lines through cracks in the pipes and where storm sewers are mistakenly connected to the sanitary sewer. The main sewer line through Latham Park isn't large enough to carry the added flows, so the water backs up, causing overflows in Latham and Lake Daniel Parks.

Why fix the problem now? Greensboro is one of many cities in the United States battling sewer overflows. As the nation's tolerance for this problem decreases, federal regulations are being put into place requiring cities to lessen the occurrence of overflows. The City's long-term plan to address the overflows in Latham Park was accelerated when it became a state mandated project in 2003. Although the City has been repairing the lines that drain to Latham Park, it would take nearly ten years to get measurable reductions in sewer overflows.

What does the project involve? The first project involves the construction of a new sewer pump station and two new force mains that will divert flow from the near capacity North Buffalo sewer line to the City's recently completed upgrade to the South Buffalo system. In addition, a new pump station is currently under construction in the Reedy Fork area that will further reduce flows into the North Buffalo sewer line by sending sewage directly to the City's T.Z. Osborne Wastewater Treatment Plant, which has a higher capacity to treat wastewater.

The second part of the plan is to increase the capacity of the sewer line that runs through Latham Park by installing a larger diameter pipe. This involves replacing the entire 3.2-mile section of line that runs from Latham Park near Hill Street, along North Buffalo Creek to the North Buffalo Wastewater Treatment Plant. The route of the pipe will be straightened as much as possible, and the number of times that the route crosses the stream will be minimized, because bends in the pipe provide areas for blockages to accumulate. The route is also being modified to preserve some older, majestic trees in Latham Park, and to minimize the need to acquire private property.

As part of the pipe replacement, the section of North Buffalo Creek that runs through Latham Park between Hill Street and Elm Street will undergo stream restoration. The steep banks will be flattened; and meanders, or curves, will be added. The City plans to plant trees, shrubs, and other plants on the stream banks, which act as a natural pollutant filter and help to prevent soil erosion. **The stream restoration will not increase or decrease flooding in the Latham Park area.**

In addition to the pipe replacement along North Buffalo Creek, 6.2 miles of pipe will be installed between the City's two wastewater treatment plants to provide the ability to transport excess flows to the City's T.Z. Osborne plant. A pump station will also be constructed at the North Buffalo Plant to facilitate the transfer of sewage.

If the project began in 2003, why hasn't construction started? A project of this magnitude must go through many steps on its way to completion. The flow of the current sewer system along North Buffalo creek must be monitored to determine the size of the replacement pipe. The land along the route of the old pipe must be surveyed to determine the route of the new pipe, and the earth below the new route must be sampled to locate the elevation of the rock below to determine the depth of the new pipe. These and other factors are considered as part of the design process.

To design all three pumps stations that will transfer flow to either the South Buffalo System, or directly to the T. Z. Osborne Wastewater Treatment Plant, the amount of flow for each system must also be known to determine the size of the pumps that will be needed. In addition to design, each component of the project requires permitting, purchasing property or easements, analyzing potential environmental impacts, bidding of construction jobs, and finally construction itself.

What is the timeline of the project? Construction of the Reedy Fork pump station has already begun, and construction of another pump station is likely to begin later this year. Construction of the pipeline that will transfer wastewater between the two treatment plants is estimated to begin in late 2005. Replacement of the sewer line between Latham Park and the North Buffalo Plant should begin in late 2006. Since construction of this line begins near the Wastewater Plant, it is not expected to reach the Latham Park area until 2007. Estimates call for the final project components to be completed by the end of 2007.

To learn more about the North Buffalo Sanitary Sewer and Stream Restoration Project, visit our website at www.greensboro-nc.gov/water or call 373-7610.